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## CLAIMS

1. An apparatus sensing unauthorized use of an electronic security device (108), the apparatus comprising a host device (101) with a housing (121) having an opening forming a port (112) configured to receive the electronic security device (108), the port (112) forming a limited passage into the housing (121) for passage of the electronic security device (108); and a port detector (308) for sensing radiation emitted from unauthorized modification of the electronic security device (108), the port detector (308) controlling or preventing operation of the apparatus based upon detection of said unauthorized modification, characterized in that
- the unauthorized modification includes coupling to the electronic security device (108) conductors (302) extending through the port (112) and wherein the port detector (308) has a loop antenna (306) encompassing the opening forming the port (112), the loop antenna (306) being responsive to time varying currents passing along the conductors (302).
2. The apparatus set forth in claim 1, wherein the port detector (308) detects electromagnetic radiation occurring at the port (112) having a prescribed frequency.
3. The apparatus set forth in claim 1, wherein the apparatus is operable to apply a time varying signal to the electronic security device (108), which time varying signal is detected by the port detector (308) at the loop antenna (306) as a signature signal [is detected by] and wherein the port detector (308) is responsive to variations in [as electrostatic radiation, and the detector measures] capacitance that are identifiable from the signature signal and indicate presence of said conductor (302).
4. The apparatus set forth in claim 1, wherein the electronic security device (108) emits a time varying signal detected by the port detector (308) as a signature signal at the loop antenna (306), and wherein the port detector (308) is responsive to variations in a capacitance of the electronic security device (108) that are identifiable from the signature signal.

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5. The apparatus set forth in claim 1, wherein the electronic security device (108) is a smart card.

6. A method of determining unauthorized use of an electronic security device (108) [comprising:] wherein the electronic security device (108) is used in an apparatus having a housing (121) that is substantially closed but for an opening defining a port (112) for receiving the electronic security device (108) and the unauthorized use includes coupling conductors (302) to the electronic security device (108), the conductors (302) extending along a path through the port (112),

10 characterized in that:

a loop antenna (306) is placed at the opening defining the port (112), encompassing the path of any said conductors (302); and,

radiation received at the loop antenna (306) is monitored to detect unauthorized use of the electronic security device (108) by providing a time varying current in the conductors (302) and detecting a resulting signature at the loop antenna (306), and determining that the electronic security device (108) has a capacitance detected by a signature signal at the loop antenna indicating presence of the conductors (302).

7. The method set forth in claim 6, further comprising at least limiting transfer of information between the electronic security device (108) and the host device (101) upon detection of said unauthorized use.

8. The method set forth in claim 6, wherein the electronic security device (108) is a smart card.

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